ABSTRACT OF THE DISCLOSURE

A method of storing a data set on a storage device carrying a file of random data comprising the steps of: selecting, in dependence on a user input passphrase, a first location within the file of random data for storing a file index (FI); selecting a second location within the file of random data for storing the data set; encrypting the data set (D); storing the encrypted data set at the second selected location in the file of random data; making an entry in the file index in respect of the data set, the entry comprising an indication of the second selected location; encrypting the file index; and storing the encrypted file index at the first selected location in the file of random data. Also computer programs for carrying out such methods and storage devices arranged to operate using such methods.